

## NATURAL RESOURCES CONSERVATION SERVICE

### CONSERVATION PRACTICE STANDARD

#### RECREATION TRAIL AND WALKWAY

(feet)  
CODE 568

##### DEFINITION

A pathway for pedestrian, equestrian, bicycle and other off-road modes of travel through or to recreation resources.

##### PURPOSE

This practice may be applied as part of a resource management system to support one or more of the following purposes:

- Provide or improve recreation access.
- Provide travelways for recreational activities such as walking, horseback riding, bicycling, cross country skiing, and hiking.
- Direct travel away from ecologically sensitive and/or erosion prone areas.
- Minimize on-site and off-site damage to resources during periods of access.
- *Preserve and protect soil, plant, animal, and visual resources.*

##### CONDITIONS WHERE PRACTICE APPLIES

On land areas where prepared paths, trails and walkways are needed for effective and safe access to or through recreation *and scenic* resources.

##### CRITERIA

##### General Criteria Applicable to All Purposes

All planned work shall comply with federal, state, local and tribal laws and regulations.

Plants, landscaping timbers, traffic control measures, wooden walkways, grades, etc. shall be evaluated for effectiveness, aesthetics and accessibility.

The trail or walkway shall be conducive to the overall recreation area and aesthetically blend with the general landscape and surroundings.

The trail or walkway shall be configured to minimize adverse on-site and off-site impacts such as accelerated erosion, riparian zone degradation, stream channel and streambank damage, hydrology modification, other water resource damage, aesthetics or unacceptable damage to wildlife habitat, fragmentation, or restrict wildlife movement.

##### Grade

Grades shall be determined by *good judgment* for the intended use, location and topography. *Sustained grades shall not exceed 10 percent.*

##### Width

The minimum trail or walkway width shall be 4 feet (1.2 m). The width for pedestrian trails may be reduced to a minimum 3 feet (0.9 m) in areas where greater width would adversely affect environmentally sensitive areas, *increase the cost materially or adversely affect the visual resources.*

##### Side Slopes

Cut and fill slopes shall be stable for the soil material.

### **Drainage**

Drainage measures shall be of sufficient size, intervals and gradient to ensure adequate drainage. *A raised or elevated trail or walkway may be required for wet sites that cannot be drained.*

### **Erosion Control**

Plans shall include provisions for control of erosion. Distributed areas shall be established to vegetation as soon as practicable after construction. If soil or climatic conditions precludes the use of vegetation, and protection is needed, non-vegetative means, such as mulches or gravel, may be used. Seedbed preparation, seeding, fertilizing, and mulching shall be according to the *Hawaii Standard for Critical Area Planting (Code 342)*. Use vegetation adapted to the site that will accomplish the desired purpose. Preference shall be given to native plant species. If native plant materials are not adaptable or proven effective for the planned use, then non-native species may be used.

### **Bridges**

Bridges and elevated walkways shall be designed for the expected loading *with an adequate factor of safety*.

### **Surfacing**

If surfacing is required for a firm, stable trail *due to traffic or soil materials present*, the surfacing material shall be *cinders, crushed rock or coral, concrete, asphalt, or other material* appropriate for the anticipated traffic and operational conditions.

### **Safety**

Safety of the users shall be incorporated into the design. Adequate directional and warning signs, handrails, bridges, and culvert shall be placed as dictated by the site and intended use. Protection from slides and falling rocks shall be provided, where needed.

## **CONSIDERATIONS**

Assure safe ingress and egress to the trail or walkway.

Consider requirements of Americans with Disabilities Act, where appropriate.

Pedestrian and equestrian trail and walkway grades should generally not exceed 10 percent, *but may vary from specific grades, widths, and clearing requirements if so dictated by location and topography*. Grades for other uses may be steeper such as cross-country skiing, which may be as steep as 50 percent for difficult trails and hiking trails, which may be as steep as 20 percent.

Assure adequate parking for users and an operation and maintenance staging area.

Consider saving and maintaining key trees and other vegetation that have scenic value, provide shade, reduce erosion and runoff, provide habitat for wildlife, and/or add to the visual quality of the area.

Consider adjoining land uses and the proximity to residences, utilities, cultural resources, threatened and endangered species of plants and animals, wetlands, important farmlands, or other environmentally sensitive areas, and areas of special scenic value.

Consider potential ecological and human impacts when planning a trail for use by motorized vehicles.

If the purpose of the trail or walkway is improvement of water quality, the trail or walkway should be (re) located as far away from the waterbody or watercourse as possible. Any work in and/or discharges near streams, wetlands or waterbodies may require a permit from the US Army Corps of Engineers, state water quality (permitting) authority, or local authority.

## **PLANS AND SPECIFICATIONS**

Plans and specifications for recreation trails and walkways shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. Plans and specifications shall include construction plans, drawings, job sheets or other similar documents. These documents shall specify the requirements for installing the practice, including the kind, amount and quality of materials to be used.

*Construction plans for recreation trails and walkways should show the trail length, width and location. Any cuts and fills should be defined with sufficient grades and elevations. Dimensions and elevations of all bridges, drainage structures, signs, and*

*handrails should be shown on the plans. All material requirements should be shown on the plans. If vegetation of disturbed area is required, the plans shall specify species, planting method, and fertilizer requirements.*

## **OPERATION AND MAINTENANCE**

An Operation and Maintenance (O&M) plan shall be prepared for and reviewed with the landowner or operator. The plan shall specify that the treated areas and associated practices are inspected annually and after significant storm events to identify repair and maintenance needs.

*Provisions shall be made for maintaining all wearing surfaces, signs, and drainage structures.*